

# Annual Report 2002 of the Environmental Finance Center Network

Environmental Finance Center Network

2002 Annual Report

## Boise State University EFC

### A key focus of the EFC at Boise State University is utility rate setting and capital improvement planning for environmental facilities

The Environmental Finance Center at Boise State University was created in 1995 and first received funding in the fall of 1996. At the end of 2002, the Center at Boise State University adopted an amendment to its name – “Northwest” – to better describe its connection to Region 10 and the states of the Pacific Northwest and Intermountain West (NEFC).

The NEFC at BSU is contained within the Department of Public Policy and Administration of the College of Social Sciences and Public Affairs.

The NEFC primarily serves the Region 10 communities in the Pacific Northwest and Intermountain states of Alaska, Idaho, Oregon and

Washington. The NEFC has also provided its specialized services in other areas throughout the country. The mission of the NEFC is to help communities and the states with the "how to pay" issues of environmental protection. This report outlines the NEFC's accomplishments in 2002, new initiatives for 2003, network collaborations, presentations and results.



### ENVIRONMENTAL FINANCE SOFTWARE TOOLS

#### Macro and Micro-Environmental Expertise

The year 2002 saw the expansion of the NEFC staff capabilities along with a new organizational structure designed to highlight the Center's focus areas of “macro-environmental” and “micro-environmental” finance. Macro-environmental finance reflects the attention to large scale, multi-jurisdictional, and complicated financing challenges such as watershed financing, TMDL implementation and drinking water source protection. Micro-environmental finance relates

#### In this issue...

Introduction .....	1
Accomplishments .....	4
New Initiatives .....	9
Network Collaborations .....	11

to the Center's traditional services such as water and wastewater utility finance training and technical assistance. It is expected that EPA "base" funding will be nearly equally divided between these two focus areas in the future. We believe that this division of resources best meets the needs of the Region 10 communities.

### **SOFTWARE HELPS LOCAL OFFICIALS SAVE TIME IN TACKLING "HOW TO PAY" CHALLENGES**

#### **CAPFinance™ and Ratio8™**

A key focus of the NEFC at Boise State University is the development of computer software tools that improve the capabilities of environmental systems in meeting requirements for protection of the environment and public health. The NEFC also provides training and technical assistance in the use of utility rate setting and capital improvement planning models for environmental facilities.

The Northwest Environmental Finance Center at Boise State University (NEFC) has developed two financial software programs, CAPFinance™, and Ratio8™, which can be used by local governments and water and wastewater utility systems to analyze the cost of system replacement and financial condition, respectively.

The CAPFinance software incorporates water or wastewater system asset inventory information with a financial planning model which can be used to determine how much money is needed for system replacement. An easy-to-use, icon-driven program, CAPFinance provides a simple method of accounting for capital assets and analyzing funding options for renewing and replacing those assets. Communities can both save time in creating asset inventory information and improve financial capability by understanding the linkages between

updated capital facilities and their ability to provide sustainable public water and wastewater services.

In the case of CAPFinance, frustration was the mother of invention. The EFC's work with small systems on rate setting showed that many communities don't completely know what they own or what the financial responsibility is for maintaining what they own. This information is essential to designing user fee systems that equitably attribute the cost of infrastructure assets to water and wastewater customers. CAPFinance helps create the inventory of public assets and provides information decision makers can use to envision asset maintenance, acquisition and replacement costs.

Many communities in the northwest have expressed an interest in the financial capacity tools developed by the NEFC. CAPFinance is an easy to use system to help communities figure out how much money is needed from rates for system replacement over the long term. It fills an urgent need for municipalities and public utility systems to help analyze system replacement costs and financial condition over time.

The State of Alaska is expected to make CAPFinance available in 2003 to rural communities statewide through the Rural Utilities Business Assistance program administered by the Department of Economic and Community Development. In fact, the NEFC has distributed copies of CAPFinance to communities throughout the United States.

CAPFinance has become a cornerstone in the collaborative efforts of the Environmental Finance Center Network (EFCN) to assist communities in meeting asset management requirements relative to improving financial capacity or governmental accounting standards. The EFCs at Cleveland State University (EPA Region 5), University of North Carolina (Region 4), and University of Maryland

(Region 3) have incorporated CAPFinance in their training and technical assistance activities.

The Center's predictions of the need for this tool have proven to be correct. The beta testing in 1999 and 2000 proved that the water system version of the model was useful. In the latter half of 2000, the NEFC incorporated many suggestions for improvements from beta testing and utilized a software development firm to create the next level of the program. In 2001, community interest in using CAPFinance had increased, with several copies being provided to water systems in the region. CAPFinance was also featured in the publication of the National Environmental Training Center at the University of West Virginia; which resulted in greater interest in this tool.

In 2001, the NEFC began work toward developing a wastewater system version of the CAPFinance tool. The combined water and wastewater version of CAPFinance was released early in 2002. A fully functional demonstration version of CAPFinance should be available for users to download from the NEFC website in 2003.

In addition to CAPFinance, the NEFC's Ratio8 program is also gaining widespread acceptance. Ratio8 is a handbook and Microsoft Excel-based spreadsheet programs that water systems can use to monitor their financial condition over time. The program also helps small systems identify key financial capacity trends and to think about how daily decisions affect their financial condition. Designed to complement any accounting and reporting system, Ratio8 focuses on eight areas: operations, revenue, liability, sales, expenses, assets, debts, and accounts receivable.

Using a "10-Point Test" method, Ratio8 transforms information from year-end financial reports to give communities a "report card" on the financial condition of their water system. In addition, the software helps communities track trends in the financial performance of their utility

to gauge whether that performance is improving or declining over time.

### RateCheckup™

The year 2002 saw the initial development of RateCheckup™, the NEFC's new water utility rate setting model. Advances in personal computer operating systems have necessitated the development of a water utility rate setting model to replace RateMod Pro; long used by the NEFC as the ideal rate setting teaching tool. The increasing sophistication of computer operating systems, such as Windows 2000 and Millennium Edition, has made the use of RateMod Pro in a classroom setting more difficult. The new model will enable the NEFC to reach a maximum number of water systems and provide better training on rate setting to those systems.

RateCheckup is expected to be released for beta testing in 2003. Microsoft Excel was chosen as the software platform for RateCheckup because of its broad availability and ease of use.

The EFC believed it was important to develop a rate model that would mesh well with the EFC's other software tools. RateCheckup will incorporate features of CAPFinance (described above) and the NEFC's water conservation cost-benefit model (a decision making tool developed by the Center and co-funded by the Washington Department of Health's Drinking Water Program).

## ACCOMPLISHMENTS AND HIGHLIGHTS

The NEFC completed work in the policy areas of Drinking Water and Wastewater System Capacity Building, Watershed Protection, Brownfields, and Superfund during 2002. It is important to note that this work was carried out using a variety of funding resources. The cornerstone of the Center's funding portfolio is the EPA "Base" Grant administered through the

Region 10 office in Seattle and provided by the Office of the Chief Financial Officer. In 2002, the NEFC successfully leveraged that “base” funding by attracting contract funding from each of the states in Region 10: Alaska, Oregon, Idaho and Washington. Several of these contracts are “spin-offs” from work performed under the “base” grant. This demonstrates how the federal investment in the Center has reaped benefits in terms of increasing the self-sufficiency of the NEFC as well as increasing the demand for Center expertise by the states.

## **DRINKING WATER AND WASTEWATER SYSTEM CAPACITY BUILDING**

### **Capacity Development Strategy Implementation**

The NEFC has devoted significant efforts in designing and testing drinking water system capacity assessment methodologies required by the 1996 Amendments to the Safe Drinking Water Act. As part of this effort, the NEFC has assisted states in improving institutional capacity and formulating and implementing drinking water program capacity development strategies. Prior to 2002, the NEFC assisted state drinking water programs in Alaska, Idaho, Oregon, Kansas, Iowa, Maine and Missouri in meeting the August 6, 2000 deadline for capacity development strategy implementation required by the SDWA Amendments [Section 1420(c)].

During 2002 the NEFC provided assistance to Kansas and Idaho as those states moved to implement the elements of their capacity development strategies. In Kansas, the NEFC worked with the Department of Health and Environment to provide communities with a new, multi-year budgeting tool.

### **Idaho Drinking Water System Management Handbook & Training Video**

In 2002, the NEFC developed a drinking water management handbook and videotape to educate and persuade drinking water systems on the importance of running their system like a business. These materials were developed under contract with the Department of Environmental Quality. The need for these training materials was expressed in Idaho’s strategy for improving the capacity of drinking water systems.

The handbook goes into sufficient detail to allow a current or new water system board member to understand the responsibilities involved in overseeing their water system. The accompanying videotape acts as a “refresher” for those who attended one of a series of five regional workshops (hosted by the Department), or as a substitute for the workshop for those who could not attend.

The goal of the video (produced in collaboration with Boise State University’s Broadcast Technology Program) is to advance the concepts presented in the handbook to illustrate the importance of running a water system like a business. However, rather than just repeating the concepts that are already spelled out in detail in the handbook, the video presents the materials in an entertaining way by following a fictional water system as it encounters some of the problems that could arise when a water system doesn’t plan for unexpected events.

### **Idaho Drinking Water State Revolving Fund**

The NEFC assisted the Idaho State Drinking Water Program by providing analyses of loan applications based on technical, financial, and management capacity criteria designed by the NEFC and adopted by the Idaho Department of Environmental Quality. This work has been conducted through a contract with the Department of Environmental Quality since 1997. NEFC produced loan reviews increased dramatically in

2002. These “third-party” reviews have generally revealed the lack of long-term planning and deficiencies in funding water utility system depreciation or system replacement.

#### Alaska State Revolving Fund

Toward the end of 2001, the Alaska Department of Environmental Conservation’s State Revolving Fund Program awarded a contract to the NEFC to provide financial capacity reviews for all applicants to the Drinking Water and Clean Water State Revolving Funds. This contract is a spin-off from the EFC’s work with the State of Idaho.

#### Washington Public Works Board Technical Assistance

For the second straight year the NEFC has assisted the State of Washington Public Works Board in providing technical assistance to Washington communities in 2002. This work included providing one-on-one assistance in financial capacity building to towns such as Wilkeson, Lyman, and Waitsburg, as well as financial evaluation and analysis services to the Klickitat Public Utility District. In addition, the NEFC conducted a series of five regional workshops on financial capacity building throughout the state. NEFC-designed tools, such as the Board’s five-year budgeting worksheets, have provided invaluable financial analysis capacity to the Board’s staff in evaluating requests for Public Works and Drinking Water State Revolving Fund financing.

#### Regions 7,8,9,10 Capacity Development and Operator Certification Meeting: Kansas City, KS

EPA Region 7 hosted the fourth annual meeting of the drinking water capacity development and operator certification staffs of the states and EPA regional offices for Regions 7, 8, 9, and 10. The NEFC Director served as a co-facilitator for the three-day event with the Director of the New Mexico EFC (Region 6) and offered additional presentations on water system asset management, utility rate setting, and multi-year budgeting.

#### Region 7 State Drinking Water Stakeholder Meetings

USEPA Region contracted with the NEFC in 2002 to facilitate meetings with public drinking water system stakeholders in the states of Iowa, Kansas, Missouri, and Nebraska. These meetings, conducted in the summer of 2002, were convened to solicit the comments and advice of stakeholders who assisted the state drinking water programs in fashioning capacity development strategies as required by the 1996 amendments to the Safe Drinking Water Act. Stakeholders provided advice and counsel to the drinking water programs as each state prepared its first “Report to the Governor” on the implementation of its capacity development strategy.

#### Utility Rate Setting Training and Technical Assistance

The NEFC continued to conduct utility rate design workshops and presentations within Region 10 in 2002. The workshops were organized based upon local demand for assistance and met the goal of providing this training in the majority of Region 10 states, primarily in Oregon, Washington and Idaho. The Center continues to meet demands for one-on-one technical assistance in rate setting.

### Enhanced Sanitary Survey

In 2001, the NEFC developed an electronic version of a state sanitary survey that runs on a Pocket PC platform for the Idaho Department of Environmental Quality. On paper, this form could be as large as 30 or 40 pages of readings, comments, questions and analysis. By moving toward an electronic version of a sanitary survey, it reduced the need of paper forms and increases efficiency by eliminating the need for data entry. It also allows for storage in a database that later will be linked to state and federal databases which reduces time and improves accuracy for the public utility.

In 2002, the NEFC began working with the EPA's Drinking Water Academy staff to develop the next generation of sanitary surveys for handheld computers. In 2003, the NEFC is expected to finish work on a new electronic sanitary survey that will offer standardized information collection and management according to the "eight essential elements" design required by drinking water regulations. The Region 1 states have been targeted as the development and testing ground for the new electronic sanitary survey.

### NEFC Network Activities and NEFC/EFAB Meetings

The NEFC Director serves as an expert witness to the Environmental Financing Advisory Board (EFAB), which provides authoritative analysis on finance issues to EPA's Administrator. The NEFC Network and the EFAB extend the capabilities of the Center by contributing both valuable insights into numerous environmental and financial issues and providing new work and research opportunities. During 2002, the NEFC participated in two semi-annual meetings of EFAB. In particular, the NEFC contributed effort along with

the analysis as a criterion in compliance and enforcement action.

### NEFC Information Activities

The activities of the Center are profiled at the center's Intranet website <http://sspa.boisestate.edu/NEFC>. This allows the Center to provide information on our programs and projects without incurring the expenses of publishing a newsletter or other periodical. In 2002, the NEFC completely redesigned and revamped the website.

## WATERSHED PROTECTION

### Source Water Protection

In 2001, the NEFC began collaborating with the EFCs at the Universities of New Mexico, North Carolina, Syracuse, and Maryland on a project related to source water protection project funded by EPA. The NEFC focused its efforts on two projects. The first focuses on facilitating water source protection financial planning in Blaine County, Idaho involving federal, state, and private land ownership and shallow groundwater. The NEFC staff continued working with the County's source water protection stakeholder committee in 2002 and developed a draft drinking water protection plan for Blaine County. The NEFC will continue working with the committee to finalize the drinking water protection plan and implementation strategy.

The second project is located in the cities of Sweet Home, Lebanon, and Albany in Oregon. This project involves federal, state, and private land, TMDL and ESA compliance issues and surface water use for drinking water source protection. In 2002, the NEFC assisted in drafting a Drinking Water Protection Plan for the three

communities. The NEFC will continue to assist in finalizing the plan and in developing an implementation strategy.

The ultimate goal of the two projects is to use the results of the stakeholder processes to inform policy makers about the challenges that small communities face in meeting source water protection planning objectives, such as fostering stakeholder participation and cooperation, gaining consensus on need for voluntary and programmatic efforts necessary to protect water sources, and developing financial resources for plan implementation.

#### Idaho Source Water Protection Collaboration Group

Through our work on the source water protection pilot demonstration project in Idaho, the NEFC has initiated a number of discussions between various federal, state, and local organizations. The result has been the creation of an informal group in Idaho that meets to share information on source water protection issues and efforts. This Source Water Protection Coordination Group consists of Idaho DEQ, EPA Region 10, Idaho Rural Water Association, Idaho Association of Soil Conservation Districts, University of Idaho Cooperative Extension, Idaho Department of Water Resources, Idaho Water Resource Research Institute, Association of Idaho Cities, and the Idaho Association of Counties among others. The group continues to meet regularly to discuss protection efforts and potential collaborations within Idaho.

#### Drinking Water Protection Open House Meetings

The NEFC participated in a series of regional open house meetings, hosted by the Association of Idaho Cities and Idaho Association of Counties, to provide information on drinking water protection

to local governments. These meetings brought together federal, state, and private organizations that are involved in source water protection throughout Idaho. The exhibitors at the meeting included the Idaho Department of Water Resources, Idaho Department of Environmental Quality, University of Idaho Cooperative Extension, U.S. Geological Survey, Idaho Association of Conservation Districts, and Idaho Planning Association among others. Meetings were held in Twin Falls, Boise, Nampa, Idaho Falls, Lewiston, and Coeur d'Alene. The NEFC provided display and informational materials on watershed funding and source water protection at each meeting and attended both meetings in Nampa and Boise.

#### Stormwater Utility Financing

With the increased regulation of water quality from storm water discharges from municipal facilities, there has been an increased interest in alternative financing mechanisms for storm water facilities. As part of our work in developing watershed workshop information, the Center developed important informational material on the use and application of storm water utilities throughout the region. More utilities have expressed a need for technical assistance in evaluating the potential for forming a stormwater utility.

In 2002, the City of Pocatello, Idaho requested the Center's assistance in developing a storm water utility fee mechanism. The NEFC facilitated meetings of the city's Stormwater Utility Advisory Committee over a series of consecutive weekly meetings in Pocatello in late spring of 2002.

#### Watershed Funding Workshops – Washington

The success of previous watershed funding workshops in the northwest prompted requests from the state of Washington for similar workshops. In response to this request, the NEFC presented four workshops in Washington during February 2002. The NEFC worked closely with the EPA and the Washington Department of Ecology to target attendees and coordinate the timing and location of workshops to maximize participation. Workshop locations included the Jamestown S'Klallam Tribal Center, Mount Vernon, Yakima and Moses Lake, Washington. One hundred forty seven (147) people attended the workshops.

State specific information on funding programs and opportunities were built into the information packet and key contacts within each state participated. One hundred fifty workshop binders were prepared and delivered to workshop participants at the workshops in Washington and an additional fifty binders were provided based on follow-up requests.

Following the workshops, there were several requests for further information and additional assistance. Participants have expressed interest in information on what other communities are doing to address the issues of funding watershed strategies. The Environmental Finance Center will continue to be a conduit for sharing funding information and examples of funding strategies in Region 10.

#### Alaska Watershed Funding Workshops

The Center conducted a watershed-funding workshop on October 31, 2002 at the Alaska Tribal Conference on Environmental Management in Anchorage, Alaska. The NEFC worked with EPA Region 10 and the Alaska Native Health Board to coordinate the workshop.

Approximately 40 people attended the workshops and requests were made for additional information

and assistance. The participants in the workshop expressed a need for more support with this type of training. As with many locations throughout the country, there was a strong need for funding to support local planning efforts as well as training to build their capacity to develop overall strategies. The NEFC was contacted by workshop attendees after the workshop concerning specific funding needs and assisted participants in locating potential funding for those specific projects.

#### Directory of Watershed Resources

Communities across the country face a range of complex funding challenges as they attempt to meet the demands of environmental protection. The Environmental Finance Center (NEFC) at Boise State University has provided watershed funding workshops throughout Region 10 to assist local communities in finding creative funding solutions to support their own plans for environmental protection. As part of this effort, the NEFC provides watershed stakeholders with the funding information they need to make decisions and protect their resource.

There is a tremendous volume of information available for funding watershed restoration. However, finding and sorting through this information can be a daunting task. In addition, demands for up to date information on financial resources and financing tools has increased. This is especially true for workshop participants who are oriented to the financial tools and sources and who need further information after the workshops are delivered.



In an effort to address this need, the NEFC began creating an on-line, searchable database for watershed restoration funding in the fall of 2002. The database includes information on funding programs available for federal, state (Oregon, Washington, Idaho, and Alaska), private, and other funding sources. Users can query the information in a variety of ways including agency sponsor, keyword, or by a detailed search. At the end of a query, a brief description of each matching program will be displayed. When a specific program is selected, a detailed page of that program will be displayed and can be printed.

Due to the lack of affordable Internet in many areas, the NEFC developed the ability to create an up to date CD-ROM version of the Directory. These CD's are available free of charge upon request.

The NEFC will continue to add and update program information in the database.

## **SUPERFUND**

### **Bunker Hill Financing Assistance**

In 2001, the Idaho Governor's Office requested assistance from the NEFC in analyzing the financial requirements of implementing infrastructure improvements for the control of contaminants contained at the superfund remediation site in Smelterville. In late 2001, the NEFC began working with the Office of the Governor, the Department of Environmental Quality and its contractor, Terragraphics Engineering. The goal of the project was to identify funding resources and funding gaps relative to needed capital improvement projects.

In 2002, the NEFC completed a funding matrix of potential funding programs that corresponded to the infrastructure needs identified by Terragraphics Engineering. The combination of project mapping, community infrastructure

requirements, and potential funding sources was then used by the Governor's Office staff to begin efforts to implement the pollution and contaminant control mechanisms envisioned by the Record of Decision for the Kellogg, Idaho Superfund site.

## **NEW INITIATIVES FOR 2003**

The NEFC will pursue several new initiatives in 2003 in the policy areas of Safe Drinking Water, Watershed Protection and Brownfields.

## **DRINKING WATER AND WASTEWATER SYSTEM CAPACITY BUILDING**

### **Idaho Drinking Water State Revolving Fund**

The NEFC has been awarded a contract from the Idaho Drinking Water State Revolving Fund (IDWSRF) Program for 2003 to follow up on contractual requirements imposed by the Department of Environmental Quality to improve management and financial capacity by IDWSRF recipient water systems. The NEFC will assess the progress of recipients toward meeting contract requirements and provide technical assistance as necessary. For example, it has been found that the majority of water systems receiving IDWSRF financing lack capital improvement plans and long-term capital improvement financing strategies. The NEFC will work with communities by utilizing CAPFinance to discover capital financing requirements and develop capital finance strategies.

### **CAPFinance™**

The NEFC will continue to promote the use of CAPFinance™ to improve capital asset management in drinking water and wastewater system infrastructure. In 2003, the NEFC will develop a "generic" component of CAPFinance

that could be applied in communities for other environmental systems such as stormwater utility and solid waste infrastructure facilities.

#### Full Cost Pricing Utility Rate Setting Model Development: RateCheckup

The NEFC will complete the beta development of RateCheckup, a new Windows-based full cost pricing utility rate setting software model written in Microsoft™ Excel™. The goal will be to develop the model and offer it at no charge to water systems attending rate setting training events.

#### TMF (Technical, Managerial & Financial) Training

The NEFC will continue to deliver technical, financial, and managerial capacity training in Alaska as well as other states that express an interest in such training.

#### Enhanced Sanitary Survey – Other States

In response to the development of the Idaho Electronic Enhanced Sanitary Survey (E2S2), an electronic survey that runs on a Pocket PC platform, the NEFC and the EPA's Drinking Water Academy are investigating the opportunity to expand the scope of this project to other states. In a dual attempt to bring this technology to other states, the NEFC will work with the EPA and the New England states in developing the same type of technology. The programming language chosen for this project is Visual Basic. A local technology company called The Network Group will do the programming development. In addition, with the unveiling of the Tablet PC, some states may choose this as an alternative to Pocket PCs. The NEFC will be preparing for the conversion of the Pocket

PC sanitary survey instrument to the Tablet PC technology.

## WATERSHED PROTECTION

#### Watershed Funding Workshops - Alaska, Oregon, Washington

The NEFC has contracts with the EPA, the Oregon Watershed Enhancement Board (OWEB), and the Washington Public Works Board to conduct six watershed-funding workshops throughout Region 10. Funding for the workshops has been obtained from the states of Oregon and Washington and the EPA. As part of this effort, the NEFC will provide ongoing support to watershed groups in implementing long-term funding strategies.

#### Directory of Watershed Resources

The NEFC is discussing potential collaborations with the NEFC at the University of Maryland and the NEFC at the University of North Carolina at Chapel Hill as well as the University of Wisconsin Madison and the US Army Corps of Engineers in Illinois to expand the database to include additional state resources.

#### Watershed Funding Customer Service Assistance

The NEFC will establish a toll free customer service capability to provide one-on-one technical assistance via Internet, email, and telephone. In addition, the NEFC will establish performance measures that can be used to evaluate the utility of this approach for possible permanent establishment for Region 10.

## NETWORK COLLABORATIONS

**Source Water Protection**

The NEFC is collaborating with the EFCs at the Universities of New Mexico (now New Mexico School of Mines), North Carolina, Syracuse, and Maryland on the source water protection project with EPA.

**Watershed Protection**

The NEFC will continue to collaborate with the EFC at the University of Maryland on watershed protection and watershed funding efforts.

**Directory of Watershed Resources**

The NEFC is collaborating with the EFCs at the University of Maryland and the University of North Carolina to include Regions 3 and 4 in the watershed-funding database.

**CAPFinance™**

The NEFC will continue to collaborate with the EFC Network – primarily with the Great Lakes EFC, EFC4 at the University of North Carolina at Chapel Hill, and EFC3 at the University of Maryland – on the development and distribution of CAPFinance™.

**Utility Rate Setting**

The NEFC will continue to collaborate with the EFC Network in conducting utility rate setting training following the development of the proposed NEFC-developed utility rate setting model for water utilities.